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2. CONFLICT-FRAGILITY-EDUCATION

Issues in Conceptualization and Measurement

INTRODUCTION

In recent years, the concept of state fragility has become increasingly pertinent to discussion of conflict and education. The Inter-Agency Network for Education in Emergencies (INEE), for instance, created a Working Group on Education and Fragility in 2008, which brings together donors, policymakers and academics to ‘catalyze collaborative action on issues relating to education and fragility’ (INEE, 2014). Working Group research and mapping exercises (e.g. Smith Ellison, 2013; Davies, 2011; Barakat et al., 2008) and academic publications (e.g. Mosselson et al., 2009; Kirk, 2007) have contributed towards a growing body of literature on education and fragility. However, consideration of state fragility in research on conflict and education introduced a new level of intricacy into what is already a highly complex set of relationships. Research around the ‘two faces’ of education in conflict has already highlighted the multi-directionality of the relationship(s) between education and conflict (e.g. Davies, 2010; Paulson, 2008); fragility introduces further uncertainty around the causes, effects and interconnections of the outbreak of violent conflict, poor educational performance and instability. This complexity is heightened when seeking to explore these multiple relationships empirically as the definition and measurement of concepts like fragility are notoriously difficult (Mata and Ziaja, 2009).

This chapter seeks to lay foundations for future research on conflict, fragility and education by discussing the conceptual underpinnings of this three-way relationship, and looking at how it can be empirically operationalized. We explore ways in which conflict and fragility are defined and measured in research and policy literature and in empirical datasets and we draw out implications of these definitional issues for research around education, conflict and fragility. In doing so, we draw upon our recent longitudinal examination of the relationship between conflict, state fragility and educational outcomes (Shields and Paulson, 2014) as an exemplar, discussing how the data measures these concepts and discussing limitations of the indicators used.

We begin by introducing the three-way relationship that this chapter focuses upon by showing how recent debate around education and conflict has opened space for the consideration of fragility. We then turn to an exploration of each dimension of

the three-way relationship. First, we discuss how armed conflict has been measured, particularly in relation to education. This section demonstrates how recent quantitative research supports the assumption that conflict is damaging educational outcomes, which underpins the practice of education in emergencies (EiE). It also raises a number of questions about the most useful ways to define violent conflict in future research in order to best grasp and understand its impact on education. We then scrutinize the concept of state fragility, looking at conceptual understandings and measurements in order to highlight and consider the implications for education research of a continuing lack of clarity around the meaning of fragility. In this section we argue that research which focuses on the impact of specific aspects of fragility (e.g. governance or security) and their relationships to education may be more fruitful in understanding and explaining change. Finally, we discuss how conflict and fragility are related both conceptually and empirically before concluding with thoughts about the utility of these concepts alongside the realities of a globalizing world.

EDUCATION AND CONFLICT: 'HIDDEN CRISIS' OR BIASED 'MAINSTREAM NARRATIVE'?

One of the foremost assumptions in the field of EiE is that conflict has a damaging effect on education. This has been substantiated by a great deal of qualitative research detailing the effect of violent conflict on access to education (e.g. UNESCO, 2011), childhood wellbeing (e.g. Davies, 2004), education infrastructure (e.g. O'Malley, 2010) and loss of human capital (Buckland, 2005) among other negative effects in particular conflict-affected contexts. However, the 2012 Human Security Report (HSR) has challenged this assumption, arguing that recent quantitative research does not substantiate it. The HSR argues that the 'mainstream narrative' around education in emergencies, epitomized by the conflict-focused Education For All (EFA) Global Monitoring Report (GMR) (UNESCO, 2011), uses research from 'worst-case' conflict situations to generalize about the experience of education in all conflict-affected contexts. The GMR states that conflict around the world, a 'hidden crisis,' poses a serious threat to achieving EFA goals. The HSR, in contrast, argues that in fact quantitative research (EPDC 2010; Gates et al., 2010; UIS 2010) does not substantiate these claims since it finds that education outcomes often improve during periods of conflict.

When we review this recent research, we do find evidence of a negative relationship between conflict and education, despite the HSR reservations. The HSR is accurate in pointing out that enrolment rates do often increase during periods of conflict, but the rate at which they improve tends to decrease in conflict-affected countries (Gates et al., 2010). Other studies find negative legacies of conflict at sub-regional level or on the enrolment and attainment of particular groups of students (EPDC, 2010; UIS, 2010). So, this recent quantitative evidence along with earlier studies (e.g. Lai and Thyne, 2007) does build up a picture of a negative relationship between conflict and

enrolment. This picture is substantiated by qualitative research as discussed above. However, limitations and contradictions in existing research mean the picture is still not definitive. Generalizability is limited due to selective sampling in a number of studies, and the use of cross-sectional analysis does not allow for the exploration of how enrolment changes over time. Thus, it is possible that the observed negative changes in enrolment and the conflict often thought to have caused them may in fact share a common cause. Aside from our recent analysis (Shields and Paulson, 2014) quantitative research to date has not explored this possibility. So, the strong causality often suggested in the ‘mainstream narrative’, for instance that ‘conflict is destroying opportunities for education on a global scale’ (UNESCO, 2011, p. 31) is not firmly supported. The HSR usefully suggests that a possible common cause of conflict and negative education outcomes may be state fragility and urges researchers to explore this.

We therefore included state fragility in our analysis (Shields and Paulson, 2014), which longitudinally examined the relationship between enrolment, conflict and state fragility and included all countries for which data is available, 150 in total. Using multi-level modeling techniques we were able to explore the overall trajectory of enrolment rates across our 13-year period, from 2000 to 2012. We used enrolment rates as our indicator of educational outcomes because they are among the most consistently measured indicators of educational performance, the improvement of which has been a priority over the last decades with the EFA and Millennium Development (MDG) goals. In our analysis enrolment is measured using primary and secondary net enrolment rates (NER) as reported in the World Bank’s World Development Indicators (2013), which report data collected by the UNESCO Institute of Statistics. We required countries to have at least five NER data points over the 2000–2012 period, meaning that countries that did not meet this data requirement were excluded.

A key challenge for this research was selecting an appropriate measurement of education that could be related to conflict. While the HSR speaks of “educational outcomes” (2012, p. 79) most of the studies it cites are related to enrolment rates. Most educational research would differentiate between access – which could be measured by enrolment – and the broader notion of outcomes, which could include literacy, completion, achievement, and a broad range of phenomena such as social inclusion and emotional well-being. However, relating these outcomes to conflict is exceptionally challenging as data tends to be missing or unavailable for many countries affected by conflict. We therefore selected enrolment as our outcome variable acknowledging that it is a limited measure of education, but preferring an indicator with the widest availability of data. If enrolment is considered an outcome, this is more at the systems level (i.e. the outcome of an education system) than for individuals. However, it is quite possible that post-2015 agenda-setting and a new focus on learning outcomes and quality among donors may open possibilities for the use of other types of education data in future.

Our analysis found a statistically significant negative relationship between conflict and educational enrolment. The effects of this relationship depended upon the baseline enrolment level of a given country, like the studies discussed above. Given the long-term trend of expansion in educational enrolment over time (Boli et al., 1985) both conflict-affected and non-conflict countries in our sample tended to experience increasing enrolment rates across the period. For countries with high enrolment rates at the beginning of the period (at baseline), the effect of conflict tended to be an actual decrease in enrolment. For countries with a low baseline enrolment rate, the effect of conflict tended to be a decrease in the rate at which enrolment grows. Figure 1 illustrates this finding with hypothetical and actual conflict and non-conflict affected countries.

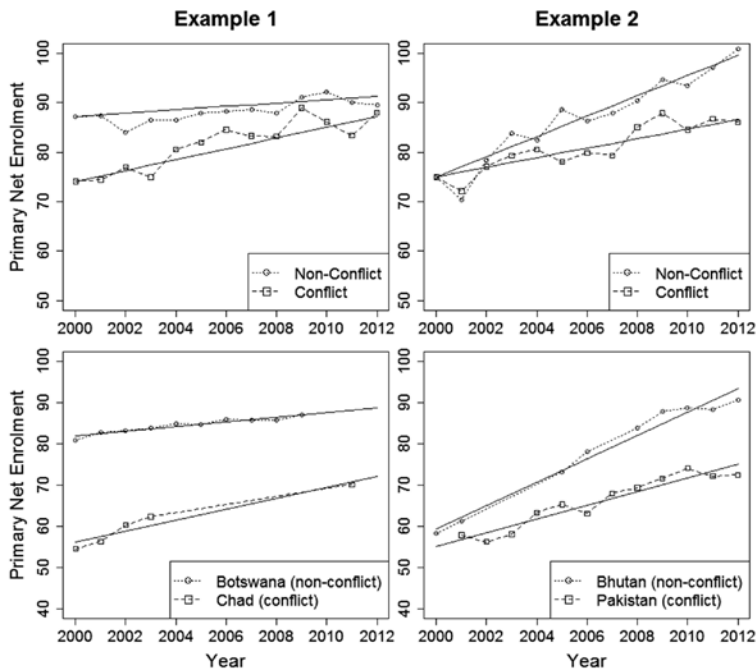


Figure 1. Hypothetical and actual changes in enrolment in conflict and non-conflict affected countries

We also found that the greater the intensity of conflict, the greater the negative effect on enrolment; an intuitive finding that suggests that more severe conflicts have a greater negative effect on education. Finally, when we included fragility in the analysis, we found a statistically significant relationship between state fragility and educational enrolment. When we controlled for fragility, the relationship between conflict and enrolment was no longer significant. In other words, state fragility was

a more powerful explanatory variable for changes in enrolment than is conflict. This finding lends support to the HSR's suggestion of that fragility may be a common cause of both conflict and changes in enrolment. Clearly, then, the definitions of conflict and fragility – both conceptually and in the data with which we worked – are important in order to fully understand and to explore the policy implications of these findings. We now turn our attention to these definitions, looking first at how conflict is defined and measured before turning our attention to fragility.

DEFINING AND OPERATIONALISING CONFLICT

Although the relationship(s) between education and conflict is a key focus for much research, systematically defining conflict in a way that applies across multiple contexts is deceptively challenging. Conflict clearly refers to violence – and generally implies organized and systematic armed violence. However, this alone may not be sufficient to define conflict as it is commonly understood in relation to education and development more broadly; questions of who is involved and why the violence occurs can shape how conflict is understood in relation to education.

Such issues are addressed by the Uppsala Conflict Data Programme (UCDP), which maintains the Battle-Related Deaths (BRD) dataset. UCDP defines armed conflict as: 'a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in one calendar year' (UCDP, 2014). The UCDP dataset dates back to 1989 and uses the conflict-year and dyad-year as its unit of observation; meaning that each observation in the dataset corresponds to any conflict that meets the criteria for inclusion in a given year; with multiple observations for conflicts that span across multiple years. The inclusion of dyads – each dyad is made up of two armed, opposing actors – also allows researchers to track the intensity of a given conflict over time, and to identify multiple simultaneous conflicts within a given nation-state. An armed conflict is considered to be a war by the UCDP when BRD exceed 1,000. The UCDP rightly claims that its dataset 'is becoming a standard in how conflicts are systematically defined and studied' (ibid). The dataset is used in the World Bank's 2011 *World Development Report*, which took conflict as its theme, the 2011 Education for All *Global Monitoring Report*, the 2012 Human Security Report, and much published academic research on violent conflict (Gates et al., 2012; Barakat & Urdal, 2009; Shields and Paulson, 2014).

UCDP's focus on conflict as organized combat is shared by the Correlates of War (CoW) dataset (Sarkees & Wayman, 2010), another major source of data on violent conflict. Unlike UCPD, CoW's unit of observation is the war, which it classifies into inter-state wars, intra-state wars and extra-state wars. The CoW dataset takes a somewhat broader view of wars, which it defines as 'sustained combat, involving organized armed forces, resulting in a minimum of 1,000 battle-related fatalities,' (ibid.) sharing the UCPD focus on organized violence but reducing the focus on the

role of the state. The data date back to 1816, and although it is less commonly cited than UCDP's data among development donors, the CoW dataset is used as the basis much academic research (e.g. Lai and Thyne, 2007; Collier & Hoeffler, 2004).

Although they differ somewhat, both the UCDP and CoW data are extremely useful in providing standardised measures of conflict; while their focus is narrow, the systematic nature of their criteria allows for some measure of comparison and generalization across nation-states, conflicts, and time. Furthermore, the two indicators are closely correlated and follow similar patterns in yearly variations, suggesting that although they are defined and measured differently, the accurately reflect a valid underlying construct. For example, as Figure 2 illustrates, the annual total of BRDs shows a clear downward trend across both UCDP and CoW data. It is important to put the early years of the twenty-first century into their historical context, particularly as they are the focus of much EiE work. As Figure 2 shows, this is as a period that has witnessed a 'continuous general decline in minor armed conflict and war' (Themnér and Wallensteen, 2012). The early 1990s, 'peak years' for conflict after the end of the Cold War, saw the UCDP count over 50 active conflicts per year, while recent 2011 figures find 37 armed conflicts active in 30 locations. 2010 figures recorded 31 active armed conflicts. While the increase between 2010 and 2011 is significant, it remains to be seen whether this is the start of an upward trend.

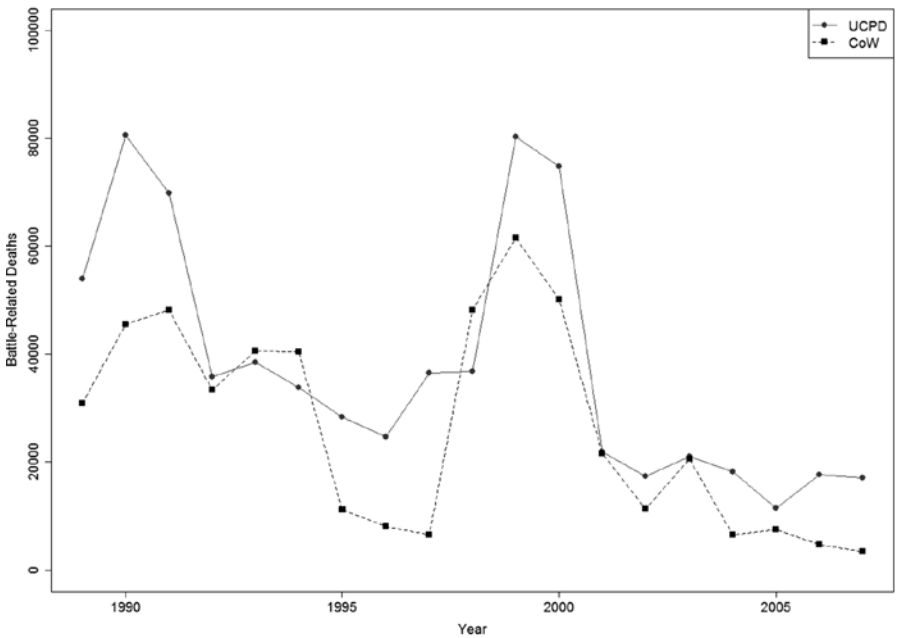


Figure 2. Annual battle-related deaths in UCDP and CoW datasets

While they are exceptionally clear in their criteria, the focused nature of the UCDP and CoW datasets inevitably excludes incidents of violence that are relevant to any understanding of conflict and education, especially given the overall trend toward declining armed conflict as conventionally defined. For instance, organized violence in which one party is not the government of a state – for example organized crime or banditry – would not be included in the UCDP data. Neither dataset would include deaths related to violence against civilians who are not organized for combat (e.g. genocide or violently suppressed popular uprising). Examples of UCDP (2012) conflicts classified as non-state or one-sided and thus not considered as conflict-affected in our analysis include recent conflicts in Mexico Nigeria, Mali, Libya, Egypt, Thailand, Somalia and Sudan. By and large, therefore, drugs-related violence, uprisings like those witnessed during the Arab Spring and extremist violence tend to be excluded from quantitative work on education and conflict, which, thanks to data availability, must only use data on armed conflict.

Further methodological problems arise when states are classified into the binary categories of the conflict-affected and non-conflict-affected. While this distinction is regularly relied upon by researchers and policymakers alike, such binary classification homogenizes states that have very different experiences with conflict: BRDs per conflict-year in the UCDP data range from many instances of 25 BRDs, to 50,000 in the Ethiopia/Eritrea conflict in 1999. Furthermore, nation-states vary considerably in their geographic size and population: the meaning and implications of 25 BRDs in India – with its population of over a billion – is in many senses incomparable with similar levels of violence in East Timor.

Despite these problems, battle-related deaths are used as a proxy for the effects of conflict by the UCDP because in comparison with alternative variables (for instance the economic consequences of war), this data is possible to collect and compare across a range of contexts (Strand & Dahl, 2010). BRD comprise deaths that occur in the ‘normal’ warfare of the conflicting parties and so include military and civilian deaths caused by ‘traditional battlefield fighting, guerilla activity (e.g. hit-and-run attacks / ambushes) and all kinds of bombardments of military units, cities, villages, etc.’ (UCDP, 2014). However, BRD are not a measure of total fatalities (all those who would be alive were it not for the conflict), which are often estimated to be much higher than BRD.

These contextual and definitional issues about conflict, data and the early twenty-first century context have implications for education in emergencies research. The frequently operationalized definition of conflict is likely to underestimate the human cost of conflict since it has to use BRD and not total fatalities or a measure that may proxy the effects of conflict on survivors. Likewise, it is limited to a very conventional understanding of violent conflict that excludes many forms of contemporary violence. This definition is then applied to a period that witnessed a comparatively low frequency and intensity of this kind of conventional conflict. Despite the limitations of this definition and its manifestation in the data, our recent analysis found that conflict had a negative effect on enrolment. This negative effect

was stronger, the more intense the conflict. Given these findings, we feel reasonably confident supporting the assumption that conflict has a damaging effect on education – in this case on rates of enrolment. We also draw attention to the need for research into the relationships between non-state and one-sided conflict and education in order to more fully understand the ways in which violent conflict might affect education. While ‘conventional’ armed conflict has been declining since the 1990s, other forms of organized violence may be on the increase (World Bank, 2011) and their effects on education remain understudied.

DEFINING AND OPERATIONALISING FRAGILITY

A good deal of work on fragility begins by discussing the lack of consensus around the term and its definition (e.g. Stewart and Brown, 2010; Cammack et al., 2006). Nevertheless, the term has gained increasing currency among development donors and the concept of fragility has been influential in donors’ policies relating to education and many other sectors (e.g. DFID, 2005, 2012; OECD/DAC 2008a, 2011). Figure 3 illustrates the rise of the use of fragility vocabulary within World Bank publications since 2000, demonstrating the increasing importance of the term in recent years.

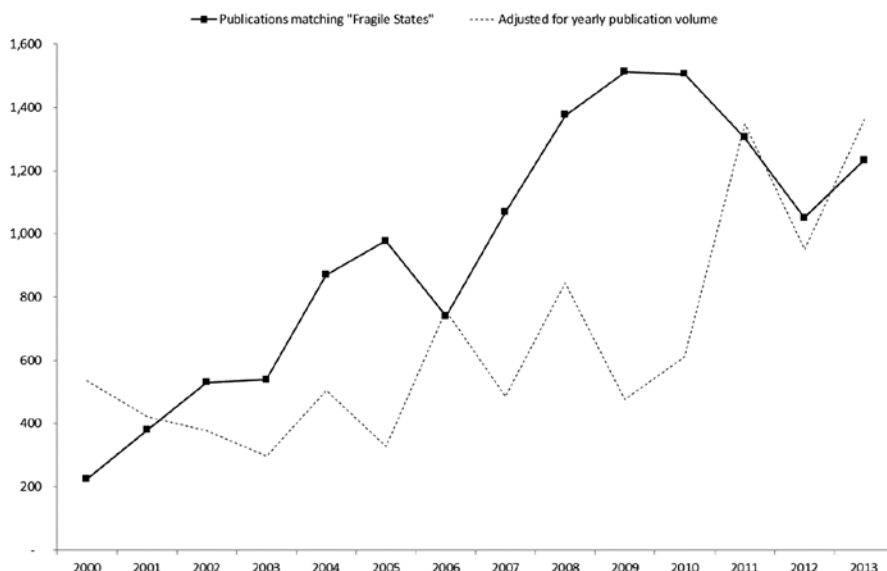


Figure 3. The term ‘fragile states’ in World Bank publications since 2000

As Bengtsson (2011) argues, development actors see fragility as ‘a unique and solvable problem’ to which they are devoting attention and resources. However, there is little consensus among actors about the boundaries of the problem that fragility

poses. This uncertainty is evident when surveying the detail of how the concept of fragility is defined in development policy, which shows considerable variation between donors and across time. One of the most commonly cited definitions, around which many state there is ‘a growing consensus among development actors’ (Elhaway et al., 2010, p. 1), is that of the OECD’s Development Assistance Committee (OECD/DAC), which in 2007 wrote:

States are fragile when state structures lack political will and/or capacity to provide the basic functions needed for poverty reduction, development and to safeguard the security and human rights of their population. (OECD/DAC 2007, p. 2)

The definition encapsulates several key features of a donor consensus around the concept of fragility: the combination of willingness and capacity (first described by DFID [Torres and Anderson, 2004; DFID, 2005]), its relationship to poverty reduction and development, and the issue of security. It is noteworthy that the OECD/DAC definition does not allude to conflict, although this is specifically mentioned in other definitions (e.g. USAID, 2005; World Bank, 2007; AusAID, 2011). Despite the stated consensus around the OECD/DAC 2007 definition, the UNDP (see Clark, 2013) is one of the few donors and international agencies to have explicitly adopted this definition. Other agencies opt instead to develop their own definitions of the concept¹ while often referring to the OECD DAC definition in introducing their own. It is worth noting that despite its impact on development agency thinking about the concept of fragility, the OECD/DAC itself modified its 2007 definition just one year later, writing:

We propose modifying the OECD/DAC definition of a fragile state, simply as one unable to meet its population’s expectations or manage changes in expectations and capacity through the political process. Whether and to what degree these expectations entail poverty reduction, development, security or human rights will depend on historical, cultural and other factors that shape state-society relations in specific contexts. (OECD/DAC, 2008a, p. 16)

The 2008 revision is couched in far more general and less specific language. The meaning of fragility is situated relative to the expectations of the population concerned, rather than laying out in absolute terms the functions of a state as the 2007 definition did. The trend towards a more loosely defined notion of fragility sits comfortably with analyses that argue the concept of fragility is normative, based on the assumption that all societies should and will eventually converge towards a model of the state based upon the Weberian ideal, which entails a state monopoly of the use of force and violence, legitimate authority and well-functioning rationalized bureaucratic institutions (Stepputat & Engberg-Pederson, 2008; Tesky et al., 2012).

The rhetorical shift in the OECD’s definition of fragility has been accompanied by other trends towards more nuanced and reflective language around the concept

of fragility. Donor documents allude to fragile “situations” instead of “states” in recognition that fragility can be confined to geographic regions or discrete aspects of society. Increasingly, fragility is juxtaposed with the notion of resiliency, defining fragility by what it is not: ‘the ability to cope with change while maintaining the bargain of the social contract.’ (OECD 2008a, p. 18). Interestingly, however, it is the 2007 OECD DAC definition, which continues to be referenced when referring to consensus around what fragility means (e.g. Elhaway et al., 2010; Clark, 2013). This is evidence of a tension between understanding the problem of fragility and its potential solutions as a problem akin to that of traditional or conventional state-building (e.g. Stepputat and Engberg-Pederson, 2008) or as a new set of globalized challenges (e.g. OECD, 2012).

Under both understandings, there is some consistency in the understanding that fragility is a departure from states (or ‘situations’) behaving as they ‘should’. Beyond this, there is considerable ambiguity on the specificities of fragility. In other words, it is unclear what this bad behavior looks like and who or what causes it and how. Clearly, this poses a challenge for assessing how well any index or dataset that sets out to measure or assess fragility in a given circumstance succeeds in doing so as such efforts inevitably set out to measure a concept around which there is limited definitional clarity.

Measuring Fragility

Despite the conceptual challenges, the rise of the fragility phraseology has been accompanied by several efforts to quantitatively measure and rank state fragility. The most prominent among these include:

Country Policy and Institutional Assessment (CPIA): Developed by the World Bank in order to help determine the allocation of development assistance, the CPIA was first published in 2005 and is used by the World Bank and others (e.g. DFID) to determine fragile countries and “situations.” The CPIA combines scores on 16 separate, policy-related criteria, based on assessments from World Bank country offices.

State Fragility Index (SFI): Developed by the Centre for Systemic Peace at George Mason University, the State Fragility Index measures political, economic, security and social aspects of countries’ effectiveness and legitimacy. It combines a variety of indicators related to development outcomes (e.g. the Human Development Index, and GDP), political processes and stability (e.g. regime types, and coups d’état), and some measure of relations within the global economy (e.g. the ratio between raw commodities and manufactured goods in exports). The eight different indices are also adopted by USAID in its writing on fragility (USAID, 2005).

Details on these and several other fragility measures are discussed in detail by Mata and Ziaja (2009). Their analysis reveals considerable variation in how donors operationalize fragility in quantitative terms. This variability is reflected in their correlations of fragility indices, which range from 0.94 (between the Brookings Institute's Index of State Weakness and the Ibrahim Index of African Governance) to 0.10 (between the University of Maryland's Peace and Conflict Instability Ledger and the CPIA). The large variation in correlations shows that measures of fragility may line up very closely, or be almost entirely unrelated, providing evidence that the concept of fragility is ambiguous and slippery.

What is most important to realize is that any *measurement* of fragility is simultaneously a theory of how a *society* should function. In nearly all cases, indicators are purposively selected and weighted in order to give an overall measurement of fragility. While the technicalities of their respective methodologies offer an impression of objectivity, the precision in measurement is underpinned by implicit and normative assumptions of how societies should function. While some of these indicators and their associated assumptions are relatively uncontroversial (e.g. the absence of armed violence) others are politically contestable. For example, the World Bank's CPIA explicitly associates high import tariffs with state fragility: countries' with average tariffs over 20% are scored poorly, while those with tariffs under 5% receive the best score.

While recognizing the limitations of fragility measurements, we used data from the Centre for Systemic Peace's (2011) State Fragility Index (SFI) in our research, mainly because data date back to 1997 and because it is specifically cited in the Human Security Report. The SFI is also a fairly centrist view of fragility: according to Mata and Ziaja (2009) its correlation with other indices is quite high (between 0.57 and 0.92), and it includes indicators related to governance, development outcomes and conflict. The SFI defines fragility based on the state's 'capacity to manage conflict; make and implement public policy; and deliver essential services and its systemic resilience in maintaining system coherence, cohesion, and quality of life; responding effectively to challenges and crises, and sustaining progressive development' (Marshall & Cole, 2011, p. 26). The definition combines elements of the more traditional, Weberian understanding of the failed state and the more fluid understanding of fragility as failed resiliency. However, the degree to which its domain indicators, as shown in Table 1 below, capture and reflect this definition in the SFI's measurement of fragility is an open one.

As indicated in Table 1, the SFI is heterogeneous, as it includes indicators related to conflict (e.g. residual war), governance (e.g. stability) and development outcomes (e.g. the infant mortality and the HDI). This raises conceptual and empirical issues for studying the relationship between fragility and any type of development outcome, including education, as the analysis can become circular. A related problem is that the weightings of the indicators are essentially arbitrary – each element of the SFI

Table 1. State fragility index domain indicators

<i>Indicator</i>	<i>Data Source</i>
Security effectiveness	Total Residual War as collected in the Major Episodes of Political Violence data set held by the Centre for Systemic Peace
Security legitimacy	State Repression as measured by the Political Terror Scale
Governance effectiveness	Regime/Governance Stability as measured by the Polity IV project at the Centre for Systemic Peace
Governance legitimacy	Regime/Governance Inclusion as measured by the Polity IV project at the Centre for Systemic Peace
Economic development effectiveness	Gross Domestic Product per capita as measured by the World Bank's World Development Indicators
Economic development legitimacy	Share of Export Trade in Manufactured Goods as measured by the World Bank's World Development Indicators and the UNDP
Social development effectiveness	Human Development Index score as reported by UNDP
Social development legitimacy	Infant Mortality Rate as reported by the US Census Bureau's International Data Base

Source: Marshall and Cole (2011).

has an equal weight regardless of how it relates to outcomes in education or any other sector: HDI and GDP both contribute a possible total of four points to the overall score, but they predict outcomes in very different ways. Both these limitations of the SFI suggest a need to use observed indicators – rather than composite indices – in the analysis of fragility and education. In other words, there may be more value in exploring individual dimensions of fragility and their relationship with education than in continuing to study fragility as a ‘unique problem’ in its own right. While more challenging, this approach will yield the best insight into how various aspects or interpretations of fragility (e.g. political institutions, functions of the state, etc.) relate to educational outcomes.

While our recent findings, which find a stronger negative relationship between educational enrolment and state fragility than between conflict and education, do lend support to the need to consider fragility in education in emergencies research, they do not shed much light upon how fragility might explain negative changes in educational outcomes. This is because of the definitional uncertainty around what fragility is, what causes it and how it is manifest. We did find that higher levels of fragility are associated with greater changes in enrolment (in the same way as more intense levels of conflict were), however in much the same way as earlier research begged the question of a common cause for conflict and poor educational outcomes, we cannot establish causality or eliminate the possibility of a common cause. Future research in this area could usefully explore potential elements of fragility – for instance governance – and their effects on education.

CONFLICT AND FRAGILITY

We now turn our attention to the final dimension of the relationship between education, conflict and fragility: that between conflict and fragility. As discussed above, the many definitions of fragility do not view the term as synonymous with violent conflict. Some definitions view conflict as symptomatic of underlying fragility (e.g. World Bank, 2007) while others see fragility as a cause of conflict (e.g. OECD/DAC, 2006) and some definitions make no mention of conflict (AusAID, 2011). Therefore, there is considerable definitional ambiguity about the relationship between conflict and fragility, including around whether the two phenomena are interlinked and whether one causes the other (and, if so, which one). Most indices that seek to measure fragility include conflict as one dimension or indicator towards their composite score (Mata & Ziaja, 2009), a decision that understands conflict as one of the causes or symptoms of fragility. As we saw above, the SFI uses a measure of ‘total residual war’ (a measure that includes the legacy of conflict as well as active armed conflict) as its indicator for security effectiveness. The presence or legacy of violent conflict, therefore, leads a country to score highly on at least one of the eight dimensions of fragility.

Though often connected conceptually and in measurement, there is also empirical evidence that the two phenomena are not necessarily interlinked. Figure 4 shows the average fragility scores of the conflict-affected countries in the dataset that we used in our analysis as well as the logarithmically averaged BRDs of each conflict. It does not show a clear relationship between the intensity of conflict and the fragility score. Eritrea and Sri Lanka, for instance, have relatively high BRDs but their fragility levels are around the average for conflict-affected countries. Ethiopia and Liberia both have high levels of fragility, which in Ethiopia coincide with very high BRDs and in Liberia with low levels of BRDs.

Furthermore, when we created a dichotomous fragility variable by classifying all those countries whose SFI score was above the median as fragile and all those

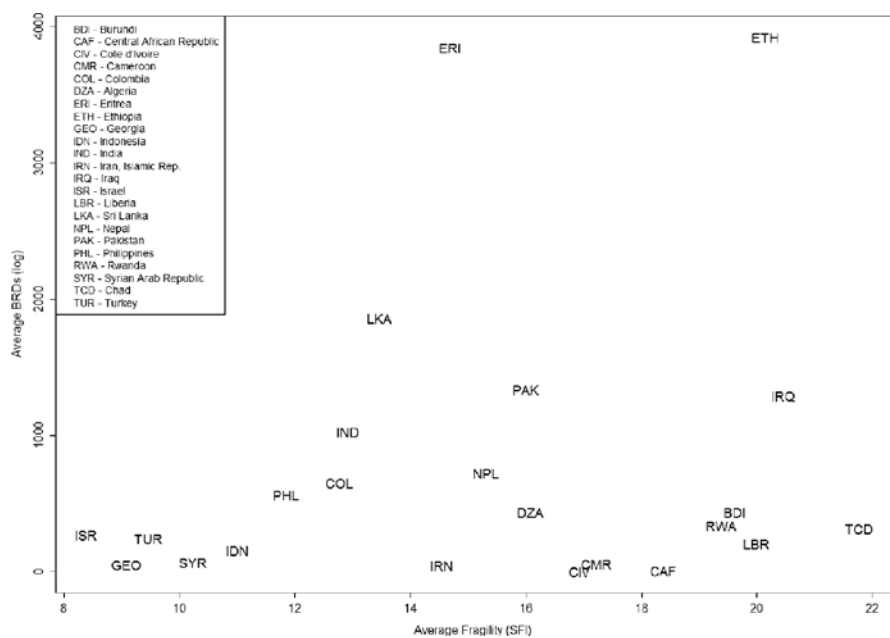


Figure 4. Conflict, fragility and battle-related deaths

whose score was below the median as non-fragile, we found independent variation between conflict-affected and fragile countries. For instance, a number of fragile countries, such as North Korea and Zimbabwe, did not experience conflict, while conflict-affected countries like Russia and Israel were not considered fragile (Shields & Paulson, 2014).

This analysis shows that notwithstanding the limitations of conflict and fragility measures discussed above, there is good evidence that the two concepts can be conceptualized and measured independently of one another. Therefore, the possibility of distinguishing between conflict and fragility, and of examining their effects independently of one another, has clear potential for research in comparative and international education. Our research lays groundwork in this area but much remains to be done, particularly in terms of disaggregating the dimensions of fragility and their relations to conflict and education.

DISCUSSION: THE CONFLICT-FRAGILITY-EDUCATION NEXUS

The preceding discussion has sought to illuminate how researchers can consider the conflict-fragility-education relationship and – of equal importance – how it can be operationalized in research. Measuring all three aspects of this relationship is challenging. This chapter has shown how most measures of conflict are somewhat

narrow interpretations of conventionally organized wars focused on relationships with the state. Broader measures of violence and instability are captured in the concept of state fragility, but the concept is vague and ambiguous. Measures of fragility can only be related to education in any meaningful sense by disaggregating the constituent indicators or dimensions of fragility and relating these directly to education outcomes of interest. Critics of large-scale comparative research would be right to point out the importance of small-scale qualitative studies that offer a “thick description” of educational contexts in relation to conflict. Nevertheless, the independence of fragility and conflict demonstrated in Figure 4 suggests that there is a good deal of affordance in considering conflict and fragility independently of one another. This is supported in our recent research, which shows that conflict and fragility have clearly differing effects on education. This demonstrates that despite considerable variation between contexts, there were discernible patterns in the relationship between enrolment, fragility and conflict in the period of our analysis.

All measures of education, conflict and fragility discussed here are state-centric: they use the nation-state as the unit of analysis or reference point. However, much research on globalization and education suggests a changing role for the nation-state, whether it is usurped entirely or transformed through its relation to flows of capital (Robertson et al., 2002). The changing nature of nation-states suggests a further need to reconsider how conflict and fragility are conceptualized and measured since they depend so heavily on the state as the unit of measurement and analysis. Changes are already taking place. UPCD recently published its geo-referenced dataset, which records individual incidents of state and non-state conflict and their geospatial coordinates, allowing researchers to investigate trends of conflict across national borders and within regions of nation-states. The language of donors also exhibits a discursive shift, adopting terms such as fragile “situations” and “contexts” rather states, an implicit acknowledgement that in contemporary times more variation is to be found within and across nation-states than between them.

The focus on the nation-state also obscures analysis of the more systemic aspects of conflict and fragility. While some donor documents allude to “exogenous” causes of fragility, these are put in impersonal or non-hierarchical terms (e.g. natural disasters or regional conflict – OECD, 2008b). Little work on fragility takes seriously the possibility of a shared ontology of fragile and non-fragile contexts, i.e. that fragility is to some-extent a zero-sum game and that non-fragile states are structurally dependent on fragile states. However, there are also signs of change in this respect: the SFI index includes a measure of manufactured goods as a proportion of total exports, providing insight into how countries are positioned in commodity chains and measuring the weak and unstable position of those that rely heavily on primary exports (e.g. minerals, oil, etc.). A more systemic approach to fragility is also evident in the OECD’s recent work, which looks at fragility through the perspective of networks of aid – noting that many fragile states are heavily reliant on a relatively small number of donors for most of their aid (2013) – and explores global factors that influence conflict and fragility (2012). Understanding

fragility as an outcome of positionality in global networks – with their own core-periphery structures – may help to develop a better understanding of fragility and its relationship to education.

This chapter has discussed approaches to conceptualizing and measuring the three-way conflict-fragility-education relationship. While our own research has laid some groundwork, there is a great deal more to be done in this respect. The questions raised through this research – the changing nature of conflict, the model of the nation-state and its reliance upon systems of mass education – are theoretically rich and of great practical significance. We hope this chapter serves as an impetus to further research that draws upon the concepts discussed here to better understand the conflict-fragility-education nexus.

NOTE

- ¹ The following organisations have developed their own definitions of fragility: AusAID, DFID, the European Community, GIZ, OECD/DAC, USAID and the World Bank.

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